NOTE TO EQUIPMENT OWNER:
For your convenience, please record the model and serial numbers of your new equipment in the spaces provided. This information, along with the installation data and dealer contact information, will be helpful should your system require maintenance or service.

UNIT INFORMATION
Model # _________________________________
Serial # _________________________________
ACCESSORIES (List type of model #)
_____________________________________
_____________________________________
_____________________________________

INSTALLATION INFORMATION
Date Installed __________________________

DEALERSHIP CONTACT INFORMATION
Company Name__________________________
Address ________________________________
Phone Number __________________________
Technician Name ________________________

NOTE TO INSTALLER:
This manual must be left with the equipment owner.
SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury, or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes, the current editions of the National Fuel Gas Code (NFGC) NFPA 54/ANSI Z223.1, and the National Electrical Code (NEC) NFPA 70.

In Canada refer to the current editions of the National Standards of Canada CAN/CSA-B149.1 and .2 Natural Gas and Propane Installation codes, and Canadian Electrical Code CSA C22.1.

Recognize safety information. This is the safety-alert symbol ▶. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words: DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies hazards which could result in personal injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

NOTE: Installer: This manual should be left with the equipment user.

WARNING

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury, death and/or property damage.

Installation and servicing of this equipment can be hazardous due to mechanical and electrical components. Only trained and qualified personnel should install, repair, or service this equipment.

WARNING

FIRE, EXPLOSION HAZARD

Failure to follow this warning could result in personal injury, death, and/or property damage.

Do not store or use combustible materials, gasoline, or other flammable vapors and liquids in the vicinity of this or any other appliance.

WARNING

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury, death and/or property damage.

Do not use this unit if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system which has been under water.

WARNING

FIRE AND EXPLOSION HAZARD

Failure to follow this warning could result in personal injury, death and/or property damage.

What to do if you smell gas:
1. Do not try to light any appliance.
2. Do not touch any electrical switch; do not use any phone in your building.
3. Leave the building immediately.
4. Immediately call your gas supplier from a nearby phone. Follow the gas supplier’s instructions.
5. If you cannot reach your gas supplier, call the fire department.

WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury and/or death.

Before performing recommended maintenance, be sure the main power switch to unit is turned off and lock-out tag is installed. There may be more than one disconnect switch.

WARNING

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury, death and/or property damage.

1. Do not turn off the electrical power to unit without first turning off the gas supply.
2. Before attempting to start the gas heating section, familiarize yourself with all the procedures that must be followed.

WARNING

FIRE, EXPLOSION HAZARD

Failure to follow this warning could result in personal injury, death, and/or property damage.

Do not attempt to light by hand. Never attempt to manually light the main burners on unit with a match, lighter, or any other flame. If the electric sparking device fails to light the main burners, refer to the following shutdown procedures, then call your dealer as soon as possible.

CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

When removing access panels or performing maintenance functions inside your unit, be aware of sharp sheet metal parts and screws. Although special care is taken to reduce sharp edges to a minimum, be extremely careful and wear appropriate protective clothing, safety glasses and gloves when handling parts or reaching into the unit.
UNIT INTRODUCTION
This unit is a small packaged gas heat/electric cooling system that utilizes the comfort of gas heating packaged along with efficient electric air conditioning. This unit uses Puron®, the ozone friendly refrigerant for cooling.

Starting or Shutting Off Unit
NOTE: Your combination heating/cooling unit is equipped with an automatic direct spark ignition and power combustion blower.

To start unit gas heat:
Refer to Fig. 2 for location of unit front access panel. Refer to Fig. 3 for location of gas valve. Refer to Fig. 4 while proceeding with the following steps.

1. Set the temperature selector on room thermostat to the lowest temperature setting and set system switch to HEAT.
2. Close the external manual gas shutoff valve.
3. Turn off the electrical supply to the unit.
4. Remove the control access panel with a 5/16-in. nut driver. (See Fig. 2.)
5. Move the selector switch on the internal gas valve to the OFF position and wait 5 minutes.
6. Move the selector switch on the internal gas valve to the ON position.
7. Replace the control access panel.
8. Turn on the electrical supply to unit.
10. Set the temperature selector on room thermostat slightly above room temperature to start unit. The induced-draft combustion air fan will start. Main gas valve will open and main burners should ignite within 25 seconds. If the burner does not light within 25 seconds, the ignition module will go into a Retry Mode after a period of approximately 20 seconds (following the 7-second ignition period). If the burners do not light by the 4th ignition try of the initial call for heat, there is a lockout.
11. Set the temperature selector on room thermostat to desired setting.

FIRE AND EXPLOSION HAZARD
Failure to follow this warning could result in personal injury, death, and/or property damage.
1. If the main burners fail to light, or the blower fails to start, shut down gas heating section and call your dealer for service.
2. Never attempt to manually light the main burners on unit with a match, lighter, or any other flame. If the electric sparking device fails to light the main burners, refer to the following shutdown procedures, then call your dealer as soon as possible.

To shut off unit gas heat:

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD
Failure to follow this warning could result in personal injury, death, and/or property damage.
Do not turn off the electrical power to unit without first turning off the gas supply.

NOTE: If the unit is being shut down because of a malfunction, call your dealer as soon as possible.
Should overheating occur or the gas supply fail to shut off, shut off the external manual gas valve to the unit before shutting off the electrical supply. Do not use this unit if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas control which has been under water.

Refer to Fig. 5 while proceeding with the following steps.
1. Set the temperature selector on room thermostat to lowest temperature setting and set system SWITCH to OFF.
2. Close the external manual shutoff valve.
3. Turn off the electrical power supply to the unit.
4. Remove the control access panel. (See Fig. 2.)
5. Move the selector switch on the internal gas valve to the OFF position.
6. Replace the control access panel.
Specifications are subject to change without notice.
Fig. 4 - To Start Unit Gas Heat
Fig. 5 - To Shut-off Unit Gas Heat

Fig. 6 - To Start Unit Electric Cooling
To replace or inspect filters in accessory filter rack (See Fig. 2):
1. Remove the filter access panel using a 5/16-in. nut driver.
2. Remove the filter(s) by pulling it out of the unit. If the filter(s) is dirty, clean or replace with a new one.
When installing the new filter(s), note the direction of the airflow arrows on the filter frame which should be pointing at the indoor coil.
3. Reinstall filter access panel ensuring opening is air and water tight.
If you have difficulty locating your air filter(s) or have questions concerning proper filter maintenance, contact your dealer for instructions. When replacing filters, always use the same size and type of filter that was supplied originally by the installer. See Table 1 for filter sizes supplied with accessory filter rack.

Fans and Fan Motors
Periodically check the condition of fan wheels and housings and fan motor shaft bearings. Contact your dealer for the required annual maintenance.

Heat Exchanger
To ensure dependable and efficient heating operation, the heat exchanger should be checked by a qualified maintenance person before each heating season, and cleaned when necessary. This checkout should not be attempted by anyone not having the required expertise and equipment to properly do the job. Contact your dealer for the required periodic maintenance.

Indoor and Outdoor Coils
Cleaning of the coils should only be done by qualified service personnel. Contact your dealer for the required annual maintenance.

Condensate Drain
The drain pan and condensate drain line should be checked and cleaned at the same time the cooling coils are checked by your dealer.

Compressor
All compressors are factory shipped with a normal charge of the correct type of refrigeration grade oil. A compressor should rarely require additional oil.

Condenser (Outdoor) Fan

⚠️ WARNING

PERSONAL INJURY AND UNIT DAMAGE HAZARD
Failure to follow this warning could result in personal injury, death or property damage.

Do not insert sticks, screwdrivers, or any other objects into revolving fan blades.

The fan must be kept free of all obstructions to ensure proper cooling. Contact your dealer for any required service.

Electrical Controls and Wiring
Electrical controls are difficult to check without proper instrumentation. If there are any discrepancies in the operating cycle, contact your local dealer and request service.

Refrigerant Circuit
The refrigerant circuit is difficult to check for leaks without the proper equipment. If inadequate cooling is suspected, contact your local dealer for service.

⚠️ WARNING

EXPLOSION AND ENVIRONMENTAL HAZARD
Failure to follow this warning could result in personal injury, death or property damage.

System under pressure. Relieve pressure and recover all refrigerant before system repair or final unit disposal. Use all service ports and open all flow-control devices, including solenoid valves.

Unit Panels
After performing any maintenance or service on the unit, be sure all panels are fastened securely in place to prevent rain from entering unit cabinet and to prevent disruption of the correct unit airflow pattern.

Combustion Area and Vent System
For proper and safe operation, the furnace needs air for combustion and ventilation. The air openings, on the furnace, the air openings to the area in which the furnace is installed, and the spacing around the furnace must not be blocked or obstructed.
The combustion area and vent system should be inspected visually before each heating season. The normal accumulation of dirt, soot, rust, and scale can result in loss of efficiency and improper performance if allowed to build up. This inspection should be done by a trained service person.
**WARNING**

**FIRE, EXPLOSION HAZARD**
Failure to follow this warning could result in personal injury, death and/or property damage.
If your unit makes an especially loud noise when the main burners are ignited, shut down the heating section and call your dealer.

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**CAUTION**

**BURN HAZARD**
Failure to follow this caution may result in personal injury.
Components in heating section may be hot after unit has been started up. When observing flame, be careful not to get close to or touch heating components.

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**Regular Dealer Maintenance**
In addition to the type of routine maintenance you might be willing to perform, your unit should be inspected regularly by a properly trained service technician. An inspection (preferably each year, but at least every other year) should include the following:

1. Inspection of all flue product passages—including the burners, heat exchanger, and flue collector box. Make sure the burner flames are blue in color and in proper adjustment. Refer to Fig. 8 for burner flame.

![Fig. 8 - Monoport Burner](C99021)

2. Inspection of all combustion-and ventilation-air passages and openings.

3. Close inspection of all gas pipes leading to and inside of your unit.

4. Inspection and, if required, cleaning of the outdoor and indoor coils.

5. Inspection and, if required, cleaning of the indoor coil condensate drain pan.

6. Inspection and cleaning of blower wheel housing and motor.

7. Inspection of all supply-air and return-air ducts for leaks, obstructions, and insulation integrity. Any problems found should be resolved at this time.

8. Inspection of the unit base to ensure that no cracks, gaps, etc., exist which may cause a hazardous condition.

9. Inspection of the unit casing for signs of deterioration.

10. Inspection of all electrical wiring and components to assure proper connection.

11. Inspection for leaks in the refrigerant circuit. Pressure check to determine appropriate refrigerant charge.

12. Operational check of the unit to determine working conditions. Repair or adjustment should be made at this time.

Your servicing dealer may offer an economical service contract that covers seasonal inspections. Ask for further details.

Complete service instructions can be found in the unit Installation, Start-up and Service Instructions.

**Warranty Certificate**
Your unit has a limited warranty. Be sure to read the warranty carefully to determine the coverage for your unit.

**Before you call for service...**

...check for several easily-solved problems.

If insufficient heating or cooling is suspected:

1. Check for sufficient airflow. Check the air filter for dirt. Check for blocked return-air or supply-air grilles. Be sure they are open and unobstructed. If these checks do not reveal the cause, call your servicing dealer.

If your unit is not operating at all, check the following list for easy solutions:

1. Check to be sure that your thermostat temperature selector is set below the indoor temperature during the cooling season or above the indoor temperature during heating season. Be sure the SYSTEM switch or MODE control is in the COOL or HEAT position and not in the OFF position.
2. If your unit still fails to operate, call your servicing dealer for troubleshooting and repairs. Specify the model and serial numbers of your unit. (Record them in this manual in the space provided.) If the dealer knows exactly which unit you have, he may be able to offer suggestions over the phone, or save valuable time through knowledgeable preparation for the service call.

**In Case of Trouble**
If you perform the steps above and unit performance is still unsatisfactory, shut off the unit and call your dealer.